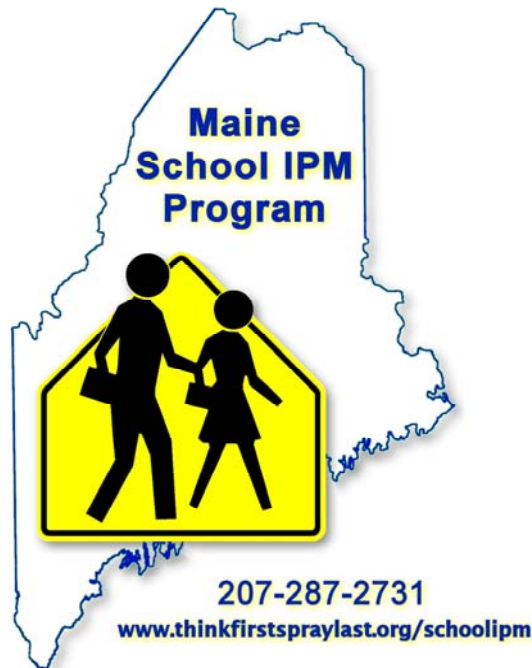


Pesticides in Schools

Risk Reduction

Starter Kit



Maine School Integrated Pest Management Program
Maine Department of Agriculture, Food, and Rural Resources
28 State House Station, Augusta, ME 04333
207-287-7616 (phone), 207-624-5065 (FAX)
www.thinkfirstspraylast.org/schoolipm

What You Should Know

About Pesticides in Maine Schools

Pesticides include bug sprays, ant cups, weed-killers, 'weed and feed' lawn products, plant disease control products, disinfectants, repellants and any other chemical used to kill a living organism.

Most Schools use Pesticides. A recent survey* showed that three out of four Maine schools use pesticides (in addition to disinfectants which are used by all schools), and one out of three Maine schools use pesticides regularly (3 or more times/year).

Children are at greater risk than are adults for both pesticide exposure and adverse effects.

Maine Law requires a license to apply any pesticides in schools or on school grounds except for routine cleaning or emergency protection from stinging insects. Our survey* showed that pesticides are applied by unlicensed staff in violation of state law in more than half of Maine schools!

NEW! Beginning August 30, 2003, all public and private Maine schools serving any grades K through 12 are required to take additional steps to minimize pesticide exposure risks. Schools are now required to adopt an Integrated Pest Management Policy, appoint an IPM Coordinator, and to notify parents/guardians and staff before pesticide applications.

What you can do:

- Review your school's Integrated Pest Management (IPM) Policy.
- Establish and cooperate with your school's IPM Committee to develop and implement an IPM Plan that includes prevention, monitoring, record-keeping, periodic evaluation and, when necessary, only low-risk pesticide use by licensed applicators in compliance with all pesticide laws.
- Review, and revise if necessary, your school's pest control contracts to require preventative and low risk practices, with pesticides used only as needed.

* Survey conducted and published in 2000 by the Maine Department of Agriculture, Food, and Rural Resources. 88% of Maine public school districts reporting. Entire report available at www.thinkfirstspraylast.org/schoolipm or by contacting the Maine School IPM Program.

Maine School Integrated Pest Management Program

www.thinkfirstspraylast.org/schoolipm

207-287-7616



Maine Board of
Pesticides Control



Maine Department of
Agriculture, Food and Rural
Resources





What is IPM?

Integrated Pest Management, or **IPM** for short, is a decision-making process that combines practical pest management strategies to prevent or control pests in ways that reduce risks to health and the environment. Farmers have used IPM for over 25 years to reduce reliance on pesticides. Now schools can adopt IPM practices, too, to ensure a safe and healthy learning environment both indoors and out.

IPM includes:

- Regular **monitoring** to detect problems early;
- **Acting** against pests **only when necessary**;
- Choosing **effective, low-risk pest control** methods;
- **Record-keeping** and **evaluation**; and
- Outsmarting pests for **long-term solutions**.

Why Use IPM? People vary widely in their sensitivity to chemicals such as pesticides, but children are among the most vulnerable to chemical-exposure risks. Similarly, some people are very sensitive to certain pests, such as stinging insects and poison ivy. In Maine, as elsewhere, schools must balance health risks of uncontrolled pest infestations with those of pesticides to ensure the health and safety of school children, staff and visitors.

IPM is the best way to achieve that balance. Under IPM, a well-organized and comprehensive approach is in place to prevent pests from reaching unacceptable levels that uses low-risk control strategies when necessary. IPM targets troublesome pests and minimizes negative impacts on people and the environment.

IPM Can Save Money. Depending on your school system's current practices, IPM has the potential to save time and money. By taking actions to avoid pest problems and applying pesticides only when necessary, many schools will reduce costs over the long term while providing a safe school environment.

State Regulations Concerning Pesticides and Integrated Pest Management in Maine Schools

Frequently Asked Questions

What is a pesticide?

- A pesticide is any natural or man-made chemical product that claims to kill, repel or mitigate a living organism. Pesticides typically used on school properties include: ant cups, insect sprays and dusts; weed control products; mouse poisons; and disinfectants applied to control mold or germs. Most, but not all, pesticides sold in Maine have an 'EPA Reg. No.' (EPA Registration Number) on the container label.

May pesticides be used in schools?

- Pesticides may only be legally applied in Maine schools by persons having a valid commercial pesticide applicators license in the proper category for the intended purpose. The exceptions to this regulation are the use of disinfectants used for routine cleaning, the use of insect repellents for personal protection, and emergency use of over-the-counter insecticides for control of stinging or biting insects that pose an immediate threat to human health.

What is required by the new pesticide regulation effective August 30, 2003?

- All schools must adopt and implement an Integrated Pest Management (IPM) policy.
- Superintendents or school boards must appoint an IPM Coordinator.
- Within the first 2 weeks of school, parents, guardians and school staff must be notified about the school's IPM policy and notification procedures for possible pesticide use during the year.
- Public and private schools must notify parents, guardians and staff before pesticides are used in schools or on school grounds.

Does this new regulation apply to childcare programs and preschools, too?

- Yes, if the childcare program is in a school or shares facilities with any grades K through 12.

Why did the Board of Pesticides Control adopt this regulation?

- The Board convened a diverse stakeholder committee representing school administrators and staff, pest management professionals, environmental organizations and others who developed the regulation to address potential health risks posed by the use of pesticides in schools.

Must the school hire an outside contractor to do pest management?

- No. Many pest management solutions can be done by school staff. The most effective solutions include keeping facilities clean and well maintained, regularly inspecting buildings and grounds for evidence of pests and pest prevention needs, and the use of non-pesticide pest traps. Pesticides may not be needed.

Does the Board of Pesticides Control recommend any specific pest control companies or have any companies been contracted to help with compliance?

- No. The BPC does not recommend any specific pest control company and no company has been contracted to help with compliance with this rule. The Board can make available a list of licensed companies and recommends that schools use the contracting guidelines available at www.thinkfirstspraylast.org/schoolipm/ or by calling 287-7545.

What is required of the Integrated Pest Management Coordinator?

- The IPM Coordinator is a school employee, not a contractor, who implements the school IPM policy. This person must be knowledgeable about IPM but is NOT required to be licensed unless pesticide application is also part of their duties. However, many schools find that having a staff member become licensed is an asset whether contracting for IPM services or doing it in-house.
- Maintains the pest management and pesticide application records.
- Notifies parents, guardians and staff and ensures that required signs are posted in advance of non-exempted pesticide applications (see below)
- Makes available to requesting parents, guardians or staff a copy of the Pesticides in Schools Regulation (CMR 01-026 Chapter 27), pesticide application records and information about pesticides used at the school.
- Making the school's IPM policy available to anyone requesting it.
- Ensures all pesticide applications are performed in compliance with the school's IPM policy.

How must the initial notification be done?

- We recommend it be included in the school's handbook given out at the start of each year. Or, the notice can be sent home in backpacks, by e-mail or any other way as long as the school is assured that all staff, parents and guardians receive it. Sample notices are available at www.thinkfirstspraylast.org/schoolipm/ or by calling 287-7545.

If the school does not use any pesticides, must the initial notice be given?

- Yes. The regulation requires that all schools adopt an IPM policy and that all schools notify staff, parents and guardians about the policy, where it may be reviewed and how the school plans to notify parents and staff before a pesticide is applied.

How is specific pesticide application notification given?

- Schools must notify parents, guardians and staff at least **5 days** in advance of non-exempted pesticide applications, providing specific information about the pesticide.
- Schools can choose between providing universal notice to all staff, parents or guardians before each non-exempted pesticide application or only to those requesting to be put on a notification registry.
- At least **two working days** prior to non-exempted pesticide applications schools must also post the required sign at points of access and in a common area of the school. For signage specifics contact the Maine Board or Pesticides Control (287-7545) or visit the Web site.

Do licensed school staff have to follow the same regulations as contracted pest management professionals?

- Yes.

How much will it cost to comply with this regulation?

- Unless a school chooses to send notices via U.S. mail, there should be minimal costs for printing the required notices and signs. Other infrequent costs include optional training sessions, optional licensing of school staff to apply pesticides and the resource materials associated with training and licensing. In the long term, Integrated Pest Management programs usually cost less than traditional monthly pesticide applications. Cost of non-compliance could be much higher!

For more information

- Maine Board of Pesticides Control: 207-287-2731, e-mail pesticides@maine.gov
Web site: www.thinkfirstspraylast.org
- Maine School IPM Program: 287-7616, e-mail: kathy.murray@maine.gov, Web site: www.thinkfirstspraylast.org/schoolipm/



Sample Integrated Pest Management Policy for Maine Schools

Pests can pose significant problems to people, property, and the environment. Pesticides pose similar risks. Children spend a great deal of time in schools and face greater potential for health effects resulting from pest and pesticide exposure. By reducing reliance on pesticides and incorporating low-risk control options, Integrated Pest Management (IPM) reduces both pests and pesticide risks. It is therefore the policy of this school to incorporate IPM procedures for controlling pests.

Integrated pest management procedures

IPM relies on pest monitoring and the most economical and least hazardous combination of cultural, physical, biological, and/or chemical controls to prevent unacceptable levels of pest activity and damage. The school will develop a site plan for each locality on school property that may experience pest problems. These plans will incorporate IPM and outline specific management tactics.

The full range of management options, including no action at all, will be considered. The choice of using a pesticide is based on a review of all other available options and a determination that these options are not acceptable or are not feasible. Non-chemical pest management methods are used whenever possible. Direct action will be used only when specific pest thresholds are reached. When it is determined that a pesticide must be used, the least hazardous material and method of application will be chosen. Pesticide applications will be timed to minimize their impact on school grounds. All pesticides will be handled according to state and federal law.

Pest management objectives

- Maintain a safe and sustainable school environment.
- Protect human health by suppressing pests that threaten public health and safety.
- Reduce exposure of humans, particularly children, to pesticides.
- Reduce or prevent pest damage to school properties.
- Reduce environmental pollution.
- Reduce the costs of pest management.
- Prevent pests from spreading beyond school property.
- Enhance the quality of life for students, staff, and others using school property.



IPM Coordinator

The school will appoint an IPM Coordinator responsible for overseeing implementation of the IPM Policy and site plans. The Coordinator's responsibilities will include:

- Recording all pest sightings by school staff and students.
- Recording all pesticide use.
- Coordinating management activities with pest control contractors.
- Approving appropriate pesticide applications—methods, materials, timing, and location.
- Assuring that all of the pest control contractor's recommendations on maintenance and sanitation are carried out where feasible.
- Posting and notification of pesticide application.
- Evaluating the school's progress in implementing the IPM plan

Education

The school community will be educated about potential pest problems and IPM methods used to achieve the pest management objectives. From the very beginning, IPM should involve people from all segments of the school community.

Record keeping

Pest sighting data sheets and pest control records will be kept current and accessible to verify the need for treatments and track the effectiveness of management activities. Pesticide records shall be maintained on site and meet the requirements of the Maine Board of Pesticides Control.

Notification/Posting

A notice will be provided to school staff, students, and parents at the beginning of each school year briefly explaining the school's pesticide use policy. The notice will indicate that pesticides may be used both indoors and outdoors, as needed. The school will provide notification of pesticide applications at least 5 days before pesticides are applied, with the exception of instances that require immediate action.

Pesticide storage and purchase

Pesticide purchases will be limited to the amount authorized for use during the year. Pesticides will be stored in an appropriate, secure site that is not accessible to students or unauthorized personnel and disposed of in accordance with label directions and state regulations.

Pesticide applicators

Any person applying pesticides on school grounds will be trained in the principles and practices of IPM and licensed by the state to apply pesticides. Applicators must follow state regulations and label precautions and must comply with the School IPM Policy and pest management site plans.

This model policy is provided to Maine K-12 schools by the Maine School Integrated Pest Management Program, a partnership between the Maine Department of Agriculture, Food and Rural Resources, the Maine Board of Pesticides Control, and the University of Maine Cooperative Extension Pest Management Office.



Suggested Notification Template – (Registry Option)

Provided by the Maine School IPM Program

Download this document at www.thinkfirstspraylast.org/schoolipm

(Note: Schools must use either ‘Universal Notification’ to notify all parents, guardians and staff in advance of each planned pesticide application OR ‘Registry Notification’ to notify only those whose names are on the school’s Pesticide Notification Registry. The suggested letter on this page is for ‘Registry Notification’.)

Dear Parent, Guardian, or Staff Member,

I am writing about three subjects that can affect children’s health in school: pests, pesticides and your right to know.

Pest Control

Because pesticides pose risks, the school uses an alternative approach to merely applying pesticides. Control of insects, rodents, and weeds at our school focuses on making the school buildings and grounds an unfavorable place for pests to live and breed. Through maintenance and cleaning, we will reduce or eliminate available food and water sources and hiding places for the pests. We will also routinely monitor the school area to detect pest problems and prevent the pests from becoming established. Some techniques we will use include pest monitoring, sanitation, pest exclusion, proper food storage, pest removal and--as a last resort--pesticides. This holistic approach is often called Integrated Pest Management (IPM).

Pesticide Use

Sometimes pesticide use may be necessary to control a pest problem. When that happens, the school will use the lowest risk products available. If higher risk pesticides must be used, notices will be posted at application sites and parents, guardians and staff have a right to know.

Your Right to Know

Parents, legal guardians, and school staff will be notified of specific pesticide applications made at the school. **To receive notification, you must be placed on the notification registry by sending in the attached ‘Request to be Notified of Planned Pesticide Applications’.** Notification will be given at least five days before planned pesticide applications. Pesticide application notices will also be posted in school and on school grounds. Notification need not be given for pesticide applications recognized by law to pose little or no risk of exposure to children or staff.

The school also keeps records of prior pesticide applications and information about the pesticides used. You may review these records, a copy of the School’s Integrated Pest Management Policy and the Pesticides in Schools regulation (CMR 01-026 Chapter 27) by contacting our IPM coordinator, _____, at _____.

If you have any questions, please contact _____. For further information about pests, pesticides and your right to know, call the Board of Pesticides Control at 207-287-2731 or visit the Maine School IPM web site at www.thinkfirstspraylast.org/schoolipm.

Sincerely,

Suggested Notification Template – (Registry Option)
Suggested Form Letter for Creation of Pesticide Notification Registry
Provided by the Maine School IPM Program
Download this document at www.thinkfirstspraylast.org/schoolipm

Request to be Notified of Planned Pesticide Applications

_____ School

I am a parent, legal guardian or staff member of this school and I want to be notified before specific pesticide applications are made at the school or on the school grounds except the following: 1) non-volatile liquids injected into cracks, crevices or wall voids; 2) non-volatile baits, gels, pastes and granular materials placed in areas inaccessible to students; 3) paints, stains and wood preservatives; 4) disinfectants used for routine cleaning; 5) non-powered applications of ready-to-use general use pesticides to control or repel stinging or biting insects where there is an urgent need to protect the health or safety of a student, staff member or other school occupant; 6) when school is not in session and will not be in session until the re-entry time specified on the pesticide label has elapsed and 7) indoor applications of a pesticide with no re-entry interval specified on its label but entry to the treated area is restricted for at least 24 hours.

I would prefer to be contacted by (circle one): U.S. Mail E-mail Telephone

Name: _____

Date: _____

Mailing Address: _____

Daytime Phone: _____ Evening Phone: _____

E-mail: _____

Return this form to:

_____ (IPM Coordinator)

_____ (School Address)

_____ (City/Town, Zip)

Suggested School Pesticide Policy Notification Template – (Universal Notice Option)
Provided by the Maine School IPM Program

Download this document at www.thinkfirstspraylast.org/schoolipm

(Note: Schools must use either 'Universal Notification' to notify all parents, guardians and staff in advance of each planned pesticide application OR 'Registry Notification' to notify only those whose names are on the school's Pesticide Notification Registry. The suggested letter on this page is for 'Universal Notification'.)

Dear Parent, Guardian, or Staff Member,

I am writing about three subjects that can affect children's health in school: pests, pesticides and your right to know.

Pest Control

Because pesticides pose risks, the school uses an alternative approach to merely applying pesticides. Control of insects, rodents, and weeds at our school focuses on making the school buildings and grounds an unfavorable place for pests to live and breed. Through maintenance and cleaning, we will reduce or eliminate available food and water sources and hiding places for the pests. We will also routinely monitor the school area to detect pest problems and prevent the pests from becoming established. Some techniques we will use include pest monitoring, sanitation, pest exclusion, proper food storage, pest removal and--as a last resort--pesticides. This holistic approach is often called Integrated Pest Management (IPM).

Pesticide Use

Sometimes pesticide use may be necessary to control a pest problem. When that happens, the school will use the lowest risk products available. If higher risk pesticides must be used, notices will be posted at application sites and parents, guardians and staff have a right to know.

Your Right to Know

Parents, legal guardians, and school staff will be notified of specific pesticide applications made at the school. Notification will be given at least five days before planned pesticide applications. Pesticide application notices will also be posted in school and on school grounds. Notification need not be given for pesticide applications recognized by law to pose little or no risk of exposure to children or staff.

The school also keeps records of prior pesticide applications and information about the pesticides used. You may review these records, a copy of the School's Integrated Pest Management Policy and the Pesticides in Schools regulation (CMR 01-026 Chapter 27) by contacting our IPM coordinator, _____, at _____.

If you have any questions, please contact _____. For further information about pests, pesticides and your right to know, call the Board of Pesticides Control at 207-287-2731 or visit the Maine School IPM web site at www.thinkfirstspraylast.org/schoolipm.

Sincerely,

Suggested Notice of Planned Pesticide Application
Provided by the Maine School IPM Program
Download this document at www.thinkfirstspraylast.org/schoolipm

Dear Parent, Guardian or Staff Member;

I am writing to let you know that a pesticide with the trade name of

_____,

and the EPA registration number of _____, is scheduled to be
applied on _____ (date), at the specific location

of _____. This is being done to help manage

_____ (name of pest) as part of our Integrated Pest

Management Program to ensure a healthy school environment. Signs will also be posted
at access points and at this central location

_____ at least two working days prior to, and
will remain posted for 48 hours after, the application. This notice is being provided at
least five days prior to the planned pesticide application in accordance with our school's
Integrated Pest Management Policy and in compliance with Maine Board of Pesticides
Control Regulation CMR 01-026 Chapter 27.

For further information regarding this action please contact the IPM Coordinator

_____ at _____.

Sincerely,

Sample School Integrated Pest Management Plan



1) General School Information

School Name: *Cobanacook Middle School*
Address: *10 Main St., Augusta, ME 04333*
Telephone Number: *207-222-2222*
E-Mail Address:
cobanschool@sad0.k12.state.me.us
Plan Prepared By: *Iman Charge, Principal*
Date: *18 April 2002*

2) School IPM Coordinator

Name: *Kerr D. Nader*
Title: *Facilities Director*
Telephone Number: *207-222-2222 ext. 2*
E-Mail Address: *kdn@sad0.k12.state.me.us*

3) School IPM Committee or Team

School IPM Coordinator(Chair)
Facilities Director
Principal
Food Service Director
Head Custodian
School Nurse
Teacher
Student
PTO Representative
Pest Control Contractor

4) School IPM Policy

The Cobanacook Middle School desires to prevent unnecessary exposure to children and employees to pesticides and reduce the need to rely on pesticides when managing pests. It is the policy of Cobanacook Middle School to only use pesticides when pests have been identified and their presence verified. Selection of treatment options or corrective actions will give priority to least-risk actions whenever possible to provide the desired control of pests. Education of staff, students, employees, and parents about IPM will be included to achieve desired objectives. When it is determined that pesticides are needed, only products registered for use in Maine will be used, and they will be used only in strict accordance with the product label. Further, only individuals properly licensed by the Maine Board of Pesticides Control will use pesticide products. Our policy prohibits the use of any pesticide by unlicensed staff except to control stinging insects that pose an imminent threat to human health on school grounds, or disinfectants used for routine cleaning. It will be this school policy to make the appropriate notification and posting as well as to keep records of all pesticide use and other pest control actions. A copy of our full School IPM Policy Statement and this School IPM Plan will be maintained in the principal's office and available upon request.

This sample IPM Plan is provided to Maine K-12 schools by the Maine School Integrated Pest Management Program, a partnership between the Maine Department of Agriculture, Food and Rural Resources, the Maine Board of Pesticides Control, and the University of Maine Cooperative Extension Pest Management Office. For more information contact:

Maine School IPM Program

28 State House Station

Augusta, ME 04333

207-287-7616 (phone)

207-624-5065 (FAX)

TDD: 207-287-4470

Kathy.murray@state.me.us (e-mail)
www.thinkfirstspraylast.org/schoolipm

or visit:

<http://www.epa.gov/pesticides/ipm/brochure/>

5) School Pest Problem(s) Description

Cobanacook School has historically treated to control pavement ants, German cockroaches, bald-faced hornets, dandelions and knot weed. The locations in the school where these have been problematic are:

Pavement ants: kitchen, pantry, classrooms along the East Wing, the teachers room, and the boys locker room.

House mice: kitchen, pantry, and basement.

German cockroach: kitchen, teachers room, under vending machines in cafeteria

Bald faced hornets: usually build nests in shrubs in front of main building, posing risks of stings from late summer until cold weather kills these hornets in late fall.

Dandelions: In all lawns.

Knot weed: spreading aggressively in the goal areas of the soccer field.

6) Inspection and Monitoring by School Staff

Annual Inspections: Our IPM Coordinator (along with pest management contractor and other appropriate school staff such as food service director, business manager, or head custodian) will perform a thorough inspection annually to identify problems and corrective actions needed to prevent and/or manage pest infestations.

The IPM Coordinator will provide the IPM Committee with an annual report identifying conditions that are contributing to our pest problems. The Committee will work with the Coordinator to plan and schedule corrective actions.

Regular Pest Monitoring: For current, recent, or likely pests, a monthly monitoring program to detect pest infestations will be established as follows:

Mice: Non-pesticide baited rodent traps in locked and secured stations in the pantry, kitchen, and basement checked and emptied daily while set.

Ants and Cockroaches: Sticky cardboard monitors will be replaced monthly under the sinks and dishwasher, along the south wall, and behind the ovens and vending machines to monitor for ants and cockroaches in the kitchen and cafeteria and under shelving units in the pantry.

All other pests: Monthly monitoring by visual inspection will be done by designated staff indoors during school year and outdoors during spring, summer and fall months.

Reporting: Monthly monitoring reports will be generated and kept on file by the IPM Coordinator.

Pest Sighting Log: Pest sighting sheets will be distributed to teachers and staff on which they may report pest activity sightings, including the identification of the pest (if known), number seen, other evidence (such as animal droppings), date, time, and location. A 3-ring binder holding the pest sighting report sheets will be kept in the main office in an accessible location. The IPM Coordinator will check for new pest sighting reports daily.

Pest Identification: When pests are detected, the specific identification of the pest will be obtained by the IPM Coordinator using professional resources such as University of Maine Cooperative Extension or other resources as necessary.

***note: Your school may elect to write all monitoring and pest identification services into your professional pest control contracts rather than using school staff.**

7) Inspection and Monitoring by Professional Pest Control Contractor

The IPM Coordinator will meet directly with the Pest Control Contractor every month to discuss monitoring reports. Bug Guy (Pest Control Contractor) will respond to the log complaints. If any sanitation or structural or operation changes are noted, it will be written in the log along with remedial recommendation. Specific service reports will also be placed in the log book documenting particular actions taken by Bug Guy.

Staff, teachers and students will be instructed on how to log pest complaints and be given a brief overview on pest identification and the conditions that promote the pests. Pamphlets and fact sheets will be made available at the time of training and or posted on bulletin boards in specific areas such as the cafeteria and teacher's lounge.

8) Pesticide Use and Storage

Bug Guy is our licensed pesticide contractor (License. # 16983). Indoors, the only pesticides used are gel baits (MaxForce Roach Killer) EPA Reg # 2243-188.

For emergency situations, Wasp Freeze 'Em' Dead REG # 3344-789 will be used to control stinging insects. All school staff will be trained on emergency response to stinging insects and custodial staff will be trained on the safe and effective use of Wasp Freeze 'Em' Dead to destroy stinging insect nests that pose an imminent threat to the health of school occupants. Custodial staff will also receive annual training on the use and storage of disinfectants used for routine cleaning.

A copy of the product label and Material Safety Data Sheet for every pesticide product used or stored at the school will be kept in an accessible location in the main office and will be provided upon request.

All appropriate steps will be taken to ensure complete compliance with state laws prohibiting unlicensed persons from the use of all pesticide products, including products such as ant cups, insect sprays, weed killers, weed and feed lawn care products, on school properties except for emergency control of stinging insects and disinfectants used for routine cleaning.

9) Non-Chemical Pest Prevention and Management

Whenever practical, the Cobanacook Middle School will use non-chemical means to control or limit pests and to minimize the use of pesticides. Along with sanitation and maintenance actions to eliminate food, water, shelter and entryways for pests, non-pesticide traps will be used to reduce pests when practicable and effective. Proper cultural practices for minimizing impacts of weeds, plant diseases, and other pests outdoors on school grounds will also be employed.

Specific practices we will use to prevent pest problems are described on the attached checklist.

10) School IPM Program Evaluation

Our school IPM plan will be evaluated every three months and at least once a year. The IPM committee or team will meet with our pest control contractor to evaluate the effectiveness of the IPM program and to develop needed improvements.

11) School IPM Plan Location

A copy of our indoor and outdoor IPM plans (including diagrams and maps of managed areas), annual and quarterly evaluations, pest contractor recommendations, and pesticide use records will be kept on file in the main administration office.

School Integrated Pest Management Inspection Checklist

Schools can reduce the likelihood and extent of pest problems through simple procedures and preventative maintenance. The following practices will help keep pests out of school buildings and hinder their establishment, thereby minimizing pest and pesticides risks. (*Download this at www.thinkfirstspraylast.org/schoolipm. Modified from IPM Standards for Schools, IPM Institute of North America*).

Kitchen and cafeteria

- ☐ Cracks and crevices in walls and floors and around permanent fixtures are sealed.
- ☐ Openings around electrical conduits, pipe chases, and ducts are sealed.
- ☐ Floor drains are covered with screens.
- ☐ Floor drains cleaned regularly with a long-handled brush and cleaning solution.
- ☐ Floor drain traps are kept full of water.
- ☐ Plumbing kept in good repair (no dripping pipes, faucets, or plugged drains)
- ☐ Sewer lines are in good repair.
- ☐ All surfaces and used utensils, trays, and dishes are cleaned and dry by the end of the day.
- ☐ All surfaces in food preparation and serving areas are regularly cleaned of grease deposits.
- ☐ Wiping cloths are disposable or laundered daily.
- ☐ Mops and mop buckets are properly dried and stored (e.g., mops hung upside down, buckets emptied).
- ☐ Overflow water trays in refrigeration units are cleaned and emptied as often as necessary to prevent water leaks.
- ☐ Areas around and under appliances and furnishings that are rarely moved (e.g., refrigerators, freezers, shelving units) are thoroughly cleaned to remove accumulated grease, dust, etc., at least monthly.
- ☐ Purchases of new kitchen appliances and fixtures are of pest-resistant design (i.e., open design, few or no hiding places for roaches, freestanding and on casters for easy thorough cleaning).
- ☐ Out-of-date charts or paper notices are removed from walls monthly.
- ☐ Vending machines maintained in clean condition inside and out.
- ☐ Recyclable containers washed with soapy water before storage or stored refrigerated or in pest-proof containers and regularly moved off-site.
- ☐ Food waste from preparation and serving areas is stored in sealed, leakproof plastic bags before removal from school grounds.
- ☐ Waste with liquid food residues (e.g., milk cartons, juice boxes) are drained of excess moisture before discarding.
- ☐ Weather stripping and door sweeps present and in good condition on exterior doors.

School IPM Inspection Checklist (con't)

Food Storage Areas

- ☐ Incoming shipments of food products, paper supplies, etc. are inspected for pests and rejected if infested.
- ☐ Food products delivered in non-pest-proof containers (e.g., paper, cardboard boxes) and not used immediately are stored refrigerated or transferred to pest-proof containers.
- ☐ Packing and shipping trash (bags, boxes, pallets) is promptly and properly disposed of or recycled.
- ☐ Stored products are rotated on a "first in, first out" basis to reduce potential for pest harborage and reproduction.
- ☐ Bulk stored products are not permitted direct contact with walls or floors, allowing access for inspection and reducing pest harborages.
- ☐ Inspection aisles (> 6" x 6") are maintained around bulk stored products.
- ☐ Food storage areas are inspected twice monthly for evidence of pests.
- ☐ Food that has come in direct contact with pests (such as ants, mice, cockroaches, mealworms or other stored product pests) is considered contaminated and is discarded promptly.
- ☐ Shelf paper not used.
- ☐ Paper products are stored separately from food products.

Classrooms, Offices and Hallways, Teachers Rooms

- ☐ Cracks and crevices in walls and floors are sealed.
- ☐ Lockers and desks emptied and cleaned at least twice per year.
- ☐ In elementary schools: sufficient space between coat hooks provided so that each child's hat and coat do not touch those of another child to prevent spreading of head lice.
- ☐ Floors cleaned regularly.
- ☐ Beverage and food containers kept for recycling are washed before storage or sealed in pest-proof container and moved off-site regularly.
- ☐ Food or food wrappers are removed from lockers, desks, teachers rooms daily
- ☐ Potential pest food items used in classrooms (e.g., beans, plant seeds, pet food and bedding, decorative corn, gourds) are refrigerated or stored in glass or metal containers with pest-proof lids.
- ☐ Refrigerators, microwave ovens, and vending machines are maintained in clean condition inside and out.
- ☐ Sink areas kept clean and dry.
- ☐ Food and beverages are allowed only in limited designated areas that are cleaned daily.
- ☐ Materials stored away from walls to allow for regular pest inspection.
- ☐ Waste materials in all rooms within the school building are collected and removed to a dumpster, compactor or designated pickup location daily.

School IPM Inspection Checklist (con't)

- ☐ Animal wastes from classroom pets or laboratory animals are flushed or placed in sealed containers before disposal.
- ☐ Furniture in classrooms and offices that are rarely moved (e.g., staff desks, bookcases, filing cabinets) receive a thorough cleaning around and under to remove accumulated lint, etc., at least annually.
- ☐ Purchases of new office and classroom furniture that is rarely moved (e.g., staff desks, bookcases, filing cabinets) are of a design that permits complete cleaning under and around the furniture, or ready movement for cleaning purposes.

Restrooms

- ☐ Rooms cleaned and trash removed daily.
- ☐ Drains regularly cleaned with long-handled brush.
- ☐ Cracks and crevices in walls and floors sealed.
- ☐ Plumbing in good repair (no leaks, drips, clogged drains).

Custodial and Maintenance Areas/Duties

- ☐ Tasks requiring cleaning are clearly distinguished from disinfecting tasks and products used for routine cleaning do not contain disinfectants.
- ☐ Cleaning and disinfecting products are stored in secure areas inaccessible to children.
- ☐ Custodial products in aerosol containers are not used except for graffiti-removal products.
- ☐ Mops and mop buckets are properly dried and stored (e.g., mops hung upside down, buckets emptied).
- ☐ Trash/recycling rooms, compactors and dumpsters are regularly inspected and spills cleaned up and leaks repaired promptly.
- ☐ Indoor garbage is kept in lined, covered containers and emptied daily.
- ☐ Packing and shipping waste disposed of promptly.
- ☐ Stored waste is collected and moved off site at least once weekly.
- ☐ Recyclables are rinsed or stored in pest-proof containers and moved off site weekly.
- ☐ Vent or heater filters are cleaned or replaced as per manufacturer's recommended interval or more frequently.
- ☐ The inside of vents and ducts are inspected at least every three years and cleaned by a certified contractor when needed.
- ☐ Moisture sources are corrected (e.g., ventilate areas where condensation forms frequently, repair plumbing, roof leaks, dripping air conditioners).

School IPM Inspection Checklist (con't.)

Pest and Pesticide Risk Management

- ☐ Pesticides (including 'weed and feed' products, mold and mildew control products, disinfectants, rodent baits, ant baits, insecticides, plant disease control products, weed-killers and any other chemical intended to kill living organisms) are never applied in or on school grounds except by persons licensed and certified in the appropriate category by the Maine Board of Pesticides Control except when used for routine cleaning or for emergency protection from stinging insects.
- ☐ No pesticides are applied for pests causing aesthetic damage only.
- ☐ Pest monitoring and pest management records are kept in the school in an accessible location.
- ☐ Lesser risk options for pest management are used first when action is required.

If baits or traps of any kind are used:

- ☐ Each bait station or trap is assigned an identification number
- ☐ A map is prepared showing the location and identification number of each trap or bait placement.
- ☐ Each trap or bait station is marked with appropriate warning language.
- ☐ Bait stations are checked at least monthly
- ☐ Rodent traps are checked daily and captured rodents are removed immediately.
- ☐ All pesticides (including disinfectants) are properly stored in original containers in secured locations according to appropriate hazardous chemical safety protocol (e.g. flammables stored in fire-resistant cabinet, acids stored separately from bases, chlorine-containing chemicals not stored near acids or ammonia)
- ☐ Material Safety Data Sheets (MSDS) and labels for each pesticide and other hazardous chemical are maintained in an accessible location.
- ☐ Pesticides (including disinfectants) inventory is managed to track current stock use and to ensure proper disposal of unused materials and empties.

Outdoors

- ☐ Tree limbs at least 6 ft away from building
- ☐ Vegetation, shrubs, and bark mulch kept at least 12 inches from building.
- ☐ Exterior doors kept shut when not in use.
- ☐ Windows and vents screened or filtered and screens are in good condition.
- ☐ Weather stripping and door sweeps present and in good condition on exterior doors.
- ☐ Building eaves, walls, gutters and roofs are sound. No evidence of water leaks or holes.
- ☐ Cracks in foundation or walls, and openings around conduit, plumbing, and doorways are sealed.
- ☐ Garbage containers, compactors, and garbage storage are placed away from building entrances.
- ☐ Dumpsters placed on hard, cleanable surfaces.
- ☐ Dumpsters have close-fitting lids and are kept closed.
- ☐ Dumpsters are emptied weekly and cleaned regularly.

Sample IPM Pest Monitoring Log Sheet

Photocopy this sheet (or download it at www.thinkfirstspraylast.org/schoolipm) and place it in each school's IPM logbook to keep a record of pests captured in insect and rodent monitoring traps.

Month _____ School _____

Head Custodian _____

- Count each of the monitor traps in your school weekly (or as often as your school IPM plan calls for). Record the number and type of **new pests found** at each trap below. At the end of the month, copy and forward the monitor sheet to _____ office.
- If any trap shows the presence of cockroaches, please call the IPM coordinator, _____.
- If any trap is damaged, lost, or full, replace it with a new dated and numbered trap.

Trap No.	Room Location	Date 1:	Date 2:	Date 3:	Date 4:	Date 5:
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						

Pest Sighting and Action Record									
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Date	Time	Specific Location	Pest	Number of Pests	Person Reporting	Recommended Action	Date Action Completed
Jan. 15 th , 2004	10:00 am	Storage cabinet in storage room between rooms 1 and 2.	Mouse droppings and holes gnawed into plastic bags of dry beans and candy used for class projects.	?	Teacher A	Place all food items in sealed jars (teacher A), clean up food spills and droppings, place snap traps in each of 2 locked monitoring boxes placed along wall under cabinets in storage room. Check traps daily. (custodian).	

Pest Sighting and Action Record

Date	Time	Specific Location	Pest	Number of Pests	Person Reporting	Recommended Action	Date Action Completed

Pesticide Application Log

Date	Time Start and Finish	Specific Location	Target Pest	Pesticide Product Name	EPA Reg. No.	Active Ingredient	Application Method	Concentration and amount	Applicator Name and license No.
9/25/02	6:00pm - 8:00 pm	Playground jungle gym E X	Yellow jacket wasps A M	Raid Wasp and Hornet Killer E	4822- 101	Propoxur Tetramethrin	Ready-to-use spray can	Full Strength Undiluted 5 sec. spray	Chris Staffmember
8/15/02	6:00am - 8:00 pm	Parking Lot E X	Dandelions, thistles, grass A M	Round-up Pro Concentrate E	524- 529	Glyphosate	Back pack sprayer	1 oz. (1 TBLS) in 1 gal. water. Applied 1 gal. of mix. to weeds in cracks.	John Smith Lawn & GroundsCare, Inc. Lic. # COA4433

Pesticide Application Log

Date	Time	Specific Location	Targeted Pest	Pesticide Product Name	EPA Reg. No.	Active Ingredient	Application Method	Concentration and amount	Applicator Name and license No.

Partial List of Pest Management Product Suppliers

NOTE: Pesticide use in schools is subject to federal and state laws. You must be licensed to apply ANY pesticides in schools. Contact the Maine Board of Pesticides Control (207-287-2731; www.thinkfirstspraylast.org) for more information. This list does not constitute an endorsement of any company or product listed, nor is it intended to be a comprehensive listing.

Where to find...	Vendors	Contact Info
General Supplies	<p>Gempler's - A variety of pest control equipment.</p> <p>Bio-Integral Resource Center (BIRC) - Non profit organization. \$15 charge for schools gets a manual and a list of 600 suppliers.</p>	<p>www.gemplers.com 1-800-332-6744 for a catalog.</p> <p>www.birc.org 510/524-2567 Fax 510/524-1758</p>
Mouse Traps and Locking Bait Boxes	<p>Bell Labs - Bell has developed a complete line of products - rodenticides, tamper-resistant bait stations, non-poisonous glue boards and mechanical mouse traps - to control rats and mice in any situation.</p> <p>Woodstream - alternative pest control products for insects and rodents.</p>	<p>www.belllabs.com 1-608-241-0202</p> <p>http://www.woodstreampro.com</p>
Insect Monitors and Traps	<p>UPMA Labs - For IPM Supplies to schools and other sensitive environments. These include well-packaged kits for training and monitoring.</p> <p>Residex - This company is a full service supplier for the pest management professional. They carry pesticides and other tools that are needed. They also have a MSDS and label database.</p> <p>BIOCONTROL NETWORK - Carry pantry traps, biological drain cleaners, fruit fly traps, and more.</p>	<p>www.ipmproducts.com</p> <p>www.residex.com 1-800-526-4222</p> <p>www.biconet.com</p>
Fly and Wasp Control	B&G Chemical & Equipment - A pest control industry supplier	<p>www.bgchem.com 1-678-688-5601</p>

	<p>Atlantic Paste & Glue, Inc. - Manufacturer of adhesive pest control products (rodent glueboards as well).</p> <p>Do-it-yourself Pest Control - Has a variety of pest control products including bio-cleaners for Drain Flies.</p>	<p>http://www.catchmaster.com/ 1-800-458-7454</p> <p>www.doyourownpestcontrol.com</p>
Sealants and Caulks	Grainger - industrial equipment from adhesives to tools	http://www.grainger.com
Professional Pest Management Tools (Mirrors, Magnifying glasses)	Professional Equipment - tools for home inspectors, PCO's, and facility professionals including moisture meters, termite detection devices, and more.	www.professionalequipment.com
Cleaners	<p>American Bio-Systems - Biological pest controls.</p> <p>Biostim Inc. - Markets microbes that eat the fats, oils, greases and organics directly from your drains, drain lines, grease traps and septic systems.</p>	<p>www.bio-systems.com</p> <p>www.biostim.com</p>
Door Sweeps and Weather Stripping	Aubuchon Hardware - Has a good selection of replaceable door sweeps and possibly a local store.	www.aubuchonhardware.com
Bird Control	Bird-X - A variety of environmentally safe bird control devices.	www.bird-x.com
Grub Control	Extremely Green Gardening Co. - Beneficial nematodes for controlling lawn grubs, plus more.	www.extremelygreen.com

Integrated Pest Management Resources

Location	Contact	Resource Area	Phone Number
Department of Agriculture	Kathy Murray	School IPM	1 207 287-7616
Board of Pesticides Control	Gary Fish	Licensing & Training	1 207 287-2731
University of Maine	Jim Dill	IPM Coordinator	1 800 287-0279
University of Maine	Clay Kirby	Insect Specialist	1 800 287-0279
University of Maine	Bruce Watt	Plant Disease Specialist	1 800 287-0279
University of Maine	Lois Stack	Horticulturist	1 800 870-7270
University of Maine		Soil Test Lab	1 207 581-2945
University of Maine	Don Barry	Structural Pests	1 800 287 0279
A&L Agricultural Labs		Soil Test Lab	1 804 743-9401
UNH	Stan Swier	Turf Insects	1 603 862-1733
UNH	John Roberts	Turf General	1 603 862-3200
U-Mass	Pat Vittum	Turf Insects	1 413 545-0268
U-Mass	Mary Owen	Turf IPM	1 508 892-0382
URI	Noel Jackson	Turf Disease	1 401 792-2932

ON THE WEB

Resource	URL
School IPM Web Site	http://www.thinkfirstspraylast.org/schoolipm
Board of Pesticides Control	http://www.thinkfirstspraylast.org
UMCE Pest Management Office	http://www.umext.maine.edu/topics/pest.htm
Univ of Minnesota Sustainable Lawn Care	http://www.sustland.umn.edu/maint/maint.htm
Center for Urban Ecology - Low Input Lawn Care	http://www.extension.umn.edu/distribution/horticulture/DG7552.html
Brooklyn Botanic Garden - Easy Lawns: Low Maintenance Native Grasses	http://www.bbg.org/gar2/topics/sustainable/handbooks/lawns/index.html
Univ of Minnesota - Thatch Control in Lawns & Turf	http://www.extension.umn.edu/distribution/horticulture/DG1123.html
Lawn Care Practices to Reduce the Need for Fertilizers and Pesticides	http://www.extension.umn.edu/distribution/horticulture/DG5890.html
Univ of Massachusetts Agroecology Program	http://www.umass.edu/umext/programs/agro/
Guelph Turfgrass Institute Links Page	http://www.uoguelph.ca/GTI/linkfram.htm
The Ultimate Turfgrass Links Page -UTLP	http://www.msu.edu/user/karcherd/turflinks/
The Pest Web	http://www.pestweb.com
Purdue University Urban IPM Site	http://www.ipm.uiuc.edu/urban/
National IPM Network Search Engine	http://search.ipm.iastate.edu/
The IPM Institute	http://www.ipminstitute.org

BOOKS

Pesticide Applicator Manuals for pest control in these categories: Turfgrass, Outdoor Ornamental, General Structural, Institutional Industrial, Commercial Industrial, & Municipal Vegetation	1-800-287-0279
Outdoor IPM for Maine Schools (Maine Department of Agriculture, Food, and Rural Resources publ.)	Download at: www.thinkfirstspraylast.org/schoolipm or order printed copy by calling 207-287-7616
IPM for Northeast Schools (NRAES Publ.)	Call 207-287-7616 to order copies